



Management Plan

PRC-MP-SH-52768

Beryllium Management Plan

Revision 0, Change 5

Published: 04/25/2019

Effective: 04/25/2019

Program: Occupational Safety and Industrial Hygiene

Topic: Occupational Safety and Industrial Health

Technical Authority: Robinson, Roby
Functional Manager: Robinson, Roby

Use Type: Administrative



- Solid Waste Operations Complex :
Screening Determination Performed: (Screening/Determination Performed (no issues))
GCX-8 (SWOC-14-021)
Screeners: Geary, Daniel
- Canister Storage Building/Interim Storage Area :
Categorical Exclusion: GCX-8 (Not in Safety Basis Compliance Matrices)
Screeners: Covey, Lori
- Central Plateau Surveillance and Maintenance :
Excluded from USQ
Exclusion Reason:
Excluded per bulleted list of Appendix B
- Waste Encapsulation Storage Facility :
Categorical Exclusion: GCX-8 (Not in Safety Basis Compliance Matrices)
Screeners: Covey, Lori
- 100 K Facility :
Categorical Exclusion: GCX-8 (Not in Safety Basis Compliance Matrices)
Screeners: Williams, James
- Less Than HazCat 3 :
Excluded from USQ
Exclusion Reason:
N/A per PRC-PRO-NS-062, Section 1.3; less than Haz Category 3 facility
- Plutonium Finishing Plant :
Categorical Exclusion: GCX-8 (Not in Safety Basis Compliance Matrices)
Screeners: King, Jeffry
- Transportation :
Excluded from USQ
Exclusion Reason:
N/A per Section 1.3.
- 324 Facility :
Excluded from USQ
Exclusion Reason:
Procedure supports DOE program and excluded per bulleted list in PRC-PRO-NS-062

JHA: Administrative

Periodic Review Due Date: 12/31/2021

Rev. 0, Chg. 5

Change Summary

Description of Change

add HR notification of changes to the Beryllium Information Booklet. update record section

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Beryllium Management Plan**Published Date: 04/25/19****Effective Date: 04/25/19****1.0 INTRODUCTION**

DOE-0342, *Hanford Site Chronic Beryllium Disease Prevention Program*, and its associated implementing procedures are designed to be used as stand-alone documents by Hanford contractors and the contractors' project Industrial Hygienists (IHs). DOE-0342 and its associated implementing procedures, however, also contain requirements that are the responsibility of individuals within the CH2M HILL Plateau Remediation Company's (CHPRC) Central Occupational Safety and Industrial Hygiene (OS&IH) organization.

The purpose of this Management Plan is to clearly define who is responsible for meeting the requirements contained in DOE-0342 and its associated implementing procedures. In addition, this management plan defines programmatic interfaces that aren't explicitly listed in DOE-0342 and its associated implementing procedures but are necessary to ensure that CHPRC effectively implements the requirements contained in these documents.

2.0 ROLES AND RESPONSIBILITIES

The tables below summarize the requirements contained in DOE-0342 and its associated implementing procedures, identifying the responsible party where it may be unclear. The Beryllium Technical Authority (TA) should be contacted if there is a question regarding a requirement not included in these tables.

Section Number	Requirement	Responsible Party
DOE-0342		
6.11.4.5	Notification of DOE Field Office regarding area sampling data	Beryllium TA
6.11.5.1	Responsibilities for monthly surface sampling	Project IHs
6.11.5.2	Responsibilities for annual surface sampling	Project IHs
6.11.8	Responsibilities for employee notification of monitoring results	Project IHs
6.13	Review of breathing zone air monitoring data results above the Limit of Quantification	Project IHs with assistance from Beryllium TA
6.14	Monitoring of affected workers	Project IHs
6.25	Periodic reports to the Site Occupational Medical Director	Beryllium TA
6.26.6	Total normal compensation calculations	Per Appendix A
6.27.2	Affected worker counseling	Beryllium Health Advocate
6.30	Maintenance of records	OS&IH Programs
6.31	Completion of periodic analyses and assessments	Per Integrated Evaluation Plan
Appendix C	Sampling of Beryllium Affected Workers	Per Appendix B

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Section Number	Requirement	Responsible Party
DOE-0342-002		
4.1.3	Provide access to facility assessment forms electronically	OS&IH Programs
4.7.1	Notify RL of results above the control level	Beryllium TA
4.9	Provide access to characterization/verification sampling reports electronically	OS&IH Programs
4.10	Developing a technical basis for exceeding control levels	Project IH with assistance from Beryllium TA
6.0	Record retention	OS&IH Programs

Section Number	Requirement	Responsible Party
DOE-0342-004		
4.1.6	Provide access to facility assessment forms electronically	OS&IH Programs
4.2.5	Notify RL of results above the control level	Beryllium TA
4.2.7	Provide access to characterization/verification sampling reports electronically	OS&IH Programs
4.2.8	Developing a technical basis for exceeding control levels	Project IH with assistance from Beryllium TA
6.0	Record retention	OS&IH Programs

Section Number	Requirement	Responsible Party
DOE-0342-005		
4.4	Notify RL of results above the control level	Beryllium TA
4.5	Provide a quarterly sampling data summary to the MSC	Beryllium TA
6.0	Record retention	OS&IH Programs

Requirement	Responsible Party
Complete semi-annual beryllium registry submittals	Beryllium TA with assistance from OS&IH Programs

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3.0 PROGRAMMATIC INTERFACES

Provider	Recipient	What Is To Be Provided	When?
Beryllium Health Advocate	Project OS&IH Manager	Notification of newly identified Beryllium Affected Worker	Upon diagnosis
Beryllium TA	Project OS&IH Manager	Complete list of project's Beryllium Affected Workers	Semi-annually
Beryllium TA	Staffing & Development Director	Updates to the Beryllium Information Booklet	When revised by the Hanford Site CBDPP Committee
Project OS&IH Manager	Beryllium TA	Monitoring data conducted for Beryllium Affected Workers using the template contained in Appendix B	Semi-annually
Project IH	Beryllium Program Administration Support	Characterization/Verification Sampling Reports	Upon completion

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4.0 DELIVERABLES

All deliverables are defined by the implementing documents listed in Section 5.

5.0 IMPLEMENTING DOCUMENTS

DOE-0342, *Hanford Site Chronic Beryllium Disease Prevention Program (CBDPP)*
DOE-0342-001, *Hanford Site Beryllium Work Permit (BWP) and Hazard Assessment Procedure*
DOE-0342-002, *Hanford Site Assessment & Characterization/Verification of Buildings Procedure*
DOE-0342-003, *Hanford Site Beryllium Posting and Labeling Requirements Procedure*
DOE-0342-004, *Hanford Site Assessment & Characterization/Verification of Structures and Conex Boxes Procedure*
DOE-0342-005, *Hanford Site Evaluation of Electrical Equipment for Beryllium Procedure*

6.0 RECORD IDENTIFICATION

None

7.0 SOURCES**7.1 Requirements**

10 CFR 850, *Chronic Beryllium Disease Prevention Program*
10 CFR 851, *Worker Safety and Health Program*

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Calculation of total normal compensation for workers who are temporarily or permanently being removed from beryllium exposure requires the involvement of multiple organizations. Typically, the Beryllium Health Advocate will make the calculation based on data provided by Human Resources and/or Finance. Once the calculations have been completed, they shall be reviewed by Finance and Legal to verify that they are correct.

DOE-0342 states that, "Overtime compensation shall be based upon the past two years of actual overtime worked by the affected worker, or the average of the affected worker's work group, whichever is greater." In determining a worker's work group, all CHPRC employees with the same COCS code should be considered as the affected worker's work group. Any certification pay due to the employee shall be pro-rated for the appropriate amount of overtime.

Beryllium Management Plan**Published Date: 04/25/19****Effective Date: 04/25/19****Appendix B – Sampling of Beryllium Affected Worker (BAW) Tracking Requirements**

Sampling shall be performed for each beryllium-affected worker within 60 days of the time the worker receives a diagnosis of Beryllium Sensitization and/or Chronic Beryllium Disease in accordance with DOE-0342, Rev. 2A, *Sample Protocols for Beryllium-Affected Workers* (Appendix C). Periodic sampling shall also be performed in accordance with *Sample Protocols for Beryllium-Affected Workers* (Appendix C) or as requested by the affected worker.

On a semi-annual basis (January and June) the Beryllium TA will provide each project OS&IH manager with a list of BAWs at their project. Within 60 days the OS&IH manager will provide the status of sampling. The status will include:

- Employee Name
- Employee's Manager
- Primary Work Area
- Required Sampling Frequency
- Last Sampling Date (or date that employee declined sampling)
- Summary of sampling data

The Beryllium TA will use the data provided by the OS&IH manager to confirm that BAW sampling has been completed in accordance with DOE-0342 Appendix C. While not required, it is recommended that the Beryllium TA complete a Work Site Assessment (WSA) of the BAW sampling at least annually.

Beryllium Management Plan**Published Date: 04/25/19****Effective Date: 04/25/19****Appendix C – Style Guide for Beryllium Program Documents**

This desk instruction is designed to assist CHPRC Beryllium Program staff in the consistent completion of beryllium program documents. The instructions contained herein are not intended to conflict with or supersede any relevant beryllium program procedures.

DETERMINATION OF FACILITY TYPE

All facilities controlled by CHPRC need to have their beryllium status appropriately documented. In most cases, the type of facility is readily apparent. For those few cases where the facility type isn't clear, the Scope sections of DOE-0342-002 and DOE-342-004 normally provide adequate guidance. This section documents the decisions made by the CHPRC Beryllium TA regarding the few situations that aren't clearly addressed by DOE-0342-002 or DOE-0342-004.

NOTE: *While both this MP and the implementing facility assessment procedures reference CareTaker, other sources of facility data such as the Stewardship Information Portal may be used instead.*

Hazardous Storage containers (including Flammable Storage containers)

Hazardous storage containers are typically identified with an "HS" or "FS" facility code. While hazardous storage containers share some characteristics with structures, CHPRC has decided that hazardous storage containers will be assessed as Conex boxes.

Storage buildings

Storage buildings may be considered to be either buildings or structures depending on the size and features present. A storage building that has offices or a lunchroom is definitely a building. A storage building that lacks heating and lighting is definitely a structure. While the "Facility Type" listed CareTaker can be considered, it should be noted that the criteria used for CareTaker differs slightly from the intent of DOE-0342-002 and DOE-0342-004.

When determining whether a storage building is a building or structure, the following should be considered:

Indicative of a building

- Presence of a traditional door
- Lighting
- Heating/air conditioning
- Windows
- Insulation
- Inner walls
- Fire marshal occupancy permit

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Indicative of a structure

- Roll-up or sliding metal doors
- Lack of heating/air conditioning
- All sheet-metal construction
- Concrete floors
- Spill containment built into the floor

Portable sheds (e.g. skid sheds)

Small movable sheds that don't have a facility number and aren't listed in CareTaker do not require assessment per DOE-0342-002 or DOE-0342-004. An IHEA should be used if it is necessary to document a portable shed's beryllium status.

Structures attached to a building

When considering whether a structure attached to a building is a separate entity, whether the structure is listed as a separate entity in CareTaker is the determining factor. For example, the gas storage structures attached to 234-5Z are each a separate structure because they are listed separately in CareTaker (2734ZF, 2734ZG, 2734ZH, etc.). The alcoves built onto the back side of 221T were not separate structures since they weren't listed separately in CareTaker. If an attached structure is not listed separately in CareTaker, all information regarding its beryllium status should be included in the BFA for its parent building.

HO Trailers

Permanently wheeled trailers such as HO trailers are normally outside the scope of the procedure. The "HO" identifier is used to indicate that something is considered to be equipment and therefore not a mobile office. Certain HO trailers, however, are used in a manner identical to mobile offices. Only HO trailers that are listed in CareTaker should be assessed in accordance with DOE-0342-002. For all other HO trailers an IHEA should be used if it is necessary to document a trailer's beryllium status.

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Appendix C – (Cont.)**DOCUMENTING THE BERYLLIUM STATUS OF UNLISTED FACILITIES AND OTHER UNUSUAL SITUATIONS**

All facilities controlled by CHPRC need to have their beryllium status adequately documented. For the vast majority of facilities, a Beryllium Facility Assessment (BFA) is the proper method for documenting the facility's status. When a facility is not listed in CareTaker and/or SWIHD, however, the documentation requirements are less clear. This guide identifies CHPRC's expectations regarding the documentation of the beryllium status for unlisted facilities and other unusual situations.

Facility requires a BFA and doesn't have a facility number

All buildings and permanent structures should have a facility number. If for some reason no number is present, work with the building manager and the Facilities & Property Management group to get a number assigned. Once the number has been assigned, provide the building or structure information to the IH Records Specialist so that the information can be entered into SWIHD.

If a Conex Box doesn't have a facility (CC) number assigned, determine with the building manager whether a number is necessary. Often, an identification or serial number is already present on the Conex Box. If such a number is present, it can be used as the Location Code identifier in SWIHD. If no suitable identifying number is present, work with the building manager and the Facilities & Property Management group to get a number assigned. Once the number has been assigned, provide the building information to the IH Records Specialist so that the information can be entered into SWIHD.

The facility has been demolished, disposed of, or transferred

An updated BFA is required to be entered into SWIHD if the facility was demolished, disposed of, or transferred after 1/1/15 or if a previous BFA has already been entered into SWIHD.

A BFA is not required if it was demolished, disposed of, or transferred prior to 2015. A note may be made in the tracking spreadsheet.

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Appendix C – (Cont.)**BERYLLIUM FACILITY ASSESSMENT FORM FOR BUILDINGS****Goal for All BFAs**

A person with no familiarity with a building should be able to answer the following questions by reading the BFA:

- The size and type of the building
- The beryllium status for the building (BCF or beryllium cleared)
- How was the beryllium status decision reached
- What are the locations of any BSAs, BCAs, and/or BRAs
- What information sources were used to make decisions
- The level of knowledge with the facility for those people interviewed
- What sampling has been conducted and what sampling is left to be conducted

Preparation for Conducting Initial Assessment Walkdown

1. Identify available documents that provide information regarding the history of the building.
2. Determine if it is possible to enter part or all of the building. If building can't be entered or if significant portions of the building are inaccessible, arrange to conduct a tabletop assessment.
3. Identify personnel who are knowledgeable of the building. If the knowledgeable personnel are unable to be part of the walkdown team, arrange to interview them after the walkdown. If the people on the walkdown can't answer your questions, have them identify other employees who can. It is critical to minimize the number of assessment questions answered as "Past – Potential".

Completion of the BFA

In addition to the specific instructions below on how to answer specific questions, remember the following:

1. All decisions should have a basis provided. For example, if the all Areas/Items of Concern except EDE are checked "No", it must be clear how that decision was reached. Acceptable examples include:
 - a. *Fred Smith (Building Administrator with 25 years of experience at the building) confirmed that it has always been used as administrative space.*
 - b. *Building drawings and documented building history confirm that no areas/items of concern have ever existed in the building.*
 - c. *Due to the building's design and location, it would not have been used as anything other than a Telecommunications Building.*
 - d. *While the full history could not be found, the walkdown team agreed that based on the known history of the building that it is very unlikely that the areas/items of concern ever existed in the building. The team agreed that all Past Areas/Items of Concern questions should be answered as "No".*

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2. If the building contains an area/item of concern other than EDE, the BFA must clearly identify the location of the area/item. While it is acceptable to post smaller buildings as BSAs or BCAs, larger buildings should be divided into cleared and uncleared areas.
3. While photos are not required, it is a good practice to attach a photo layout of the building to the BFA.

NOTES ON ANSWERING SELECT QUESTIONS**Facility Information**Assessment Date

Date that assessment was initiated. For revised assessments, this will be the date that the revisions began and not when the first assessment was started.

Project

Project/organization name that has responsibility for the facility. This should include both the WBS number and project name (for example RL13 WFMP). To facilitate the ability to sort data reports by project, always put the WBS number first and then the project name.

Facility Usage

Current usage of the facility: How is the building currently being used? How was the building used in the past? Information regarding the shape and construction of the building does not belong in this section.

ContactsIndividuals Contacted

List the names of all individuals who provided information used in this assessment. Include the date contacted and a summary of the information that they provided. List each individual's title (e.g. building administrator, NCO, RCT) as well as their level of knowledge with the building. With the exception of the HAMTC CDBPP Representative, walkdown team members not associated the building should not be listed as individuals contacted. Other members of the assessment team may be listed in the Comments section, although this is not required.

Assessment InformationAreas of Concern

Comments regarding Areas of Concern

A few reminders:

- Metal Manufacturing Activities refers to true manufacturing areas (e.g., foundries, metal extrusion, and metal component assembly). The fact that a shop may have had work involving metal piping or sheet metal doesn't mean that metal manufacturing occurred.

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- Laboratory Operations refers to areas where chemical analysis occurred. Because the concern is beryllium, focus on extent of the chemical analysis that occurred. A “laboratory” where the only analysis is done by adding a few drops of a pre-mixed reagent to a water sample is not a laboratory in the context of the BFA
- Tool Cribs refers to areas where tools were stored and supplied for use to multiple users. This is not the same as having tool boxes in the area. If this question is answered “Yes”, it implies that a tool crib attendant was based in the area.
- Machinery / Equipment Storage is actually short for “Machinery / Equipment Storage of Potentially Beryllium-Contaminated Items”. The fact that machinery or equipment may have been stored in the area doesn’t require that the question be checked “Yes” unless the potential exists for the storage of beryllium contaminated items.
- Tool Maintenance Activities refers to the modification of tools such as wrenches via cutting and/or grinding. It doesn’t apply to routine maintenance such as changing saw blades or replacing power cords. That being said, however, an area where routine tool maintenance occurred has a higher potential for other tool modification to have occurred.

Items of Concern

Comments regarding items of concern:

- Electrical Distribution Equipment – Discuss the number, type, and voltage of the EDE present (for example – two 120V circuit breaker panels are present). If details on the number, type, and voltage aren’t available, general statements such as, “*EDE consistent with a typical office building*” is acceptable. Don’t include statements regarding future sampling.
- Bridge Cranes – Discuss the number, size, type, and location of bridge cranes (for example, *a 10-ton festoon bridge crane is present in the High Bay*)
- Elevator Control Systems – note whether the elevator is still in use and whether routine maintenance continues to be done on the elevator control systems.
- Other Area/Item – discuss the reason for the concern and identify the size and location of the BSA or BCA that will be established.

Sampling Needs**Additional Characterization Sampling Required?**

Check “Yes” if any areas/items of concern (other than EDE) are identified that haven’t been cleared through characterization sampling.

Recommended Survey Units

List any survey units identified by the walkdown team. Include both the name and a description of the survey unit. In the case of large areas of concern, it is acceptable to defer the identification of specific survey until demolition preparation commences.

Example wording: Because any characterization sampling to be conducted will not occur until demolition preparation activities begin, the identification of specific survey units as well as the recommended number of sample points (both for the area and for items) was not be completed at this time.

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List by survey unit the number of sample points and any specific sample locations for items identified by the walkdown team. It is acceptable to defer the identification of the number/location of sample points until demolition preparation commences.

Recommended Number/Location of Sample Points for Items

List by survey unit the number of sample points and any specific sample locations identified by the walkdown team. It is acceptable to defer the identification of the number/location of sample points for items until demolition preparation commences.

Characterization InformationBuilding Status

With one exception, if any of the “Facility Usage” or “Items of Concern” questions are answered “Yes” or “Potential,” the building must be listed as a Beryllium Controlled Facility until it has been cleared through characterization sampling. If the only area/item of concern is electrical distribution equipment that hasn’t been characterized, list the building as “Uncharacterized EDE Only”

Summary of Sampling Data

Provide a summary of the number and type of samples collected as well as the results. The amount of detail increases as the number of samples increases.

Example of typical summary –

A total of eight samples were collected. All seven wipe samples were below the reporting limit of 0.025 µg/100 cm². The bulk sample had a reported concentration of 0.248 µg/g. Due to the small size of the building, comparison of the results to the TCV table is not appropriate.

Example of a summary for a more complex building –

2706-T had previously been sampled in 2010. A total of 16 samples were collected in 2706-T. Ten wipe samples were collected in the Decon Area/Supply Area and one sample was collected in the Maintenance Area. Based on the facility assessment and past sampling, the walkdown team agreed that only the Decon Area/Supply Area and the Maintenance Area required additional characterization sampling.

In December 2010, 17 wipe samples were collected during preventative maintenance (PM) on a Continuous Air Monitors (CAM) in 2706-T. 15 of the samples were collected on/in the CAMS and two were collected in the hood where the PM was being done. All 17 samples were below the reporting detection limit of 0.05 µg/100 cm². Only the two samples collected in the hood (11-21126-013 and 11-21126-014) are considered to be part of the building characterization. The samples collected on/in the CAMs haven’t been included into the total number of building characterization samples.

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Based on the results of the initial beryllium facility assessment walkdown of 2706-T, ten additional wipe samples were collected from the Decon Area and five additional wipe samples were collected from the Maintenance Area. All of the samples collected from the Decon Area were below the reporting detection limit (RDL) of 0.01 µg/100 cm². All of the samples collected from the Maintenance Area were below the trigger level. Based on the sampling data, 2706-T can be considered to be beryllium cleared.

List the name(s) (and identification number if available) of the characterization report(s) for the building being assessed. If sampling has been done and no characterization reports were written, list the survey number of any industrial hygiene surveys unless those surveys are included in a larger report that is referenced. If sampling doesn't have a survey number, list the dates that the samples were collected and the storage location of the sample data.

References

List any relevant documents. Examples may include:

- Building histories
- Employee interviews – provide a brief description of each employee's expertise
- Transition reports
- CERCLA documents (e.g., RAWP, EE/CA)
- Environmental sampling documents
- Technical Basis Documents

For referenced documents, include the revision number and/or the creation date. In the event that no references are applicable (such as for new mobile offices supporting ARRA activities), mark as "None."

The only documents that should be attached to BFAs are those that are directly used to make a decision on the facility status. If you attach the BCR, you don't need to attach the lab reports. Previous versions of the BFAs don't need to be attached.

Comments**Comments**

This should be a brief summary of the information obtained for this facility. This can include building type and materials, how decisions regarding areas/items of concern were made, and any other information deemed pertinent by the assessor. If documents were obtained during the assessment, they should be summarized here and referenced in the "References" section.

If there was no union representation on the walkdown, state the reason why in the Comments section. An appropriate comment could be: "C.H. Percy (CHPRC HAMTC CBDPP Representative) was contacted but she decided HAMTC participation was not required on the walkdown."

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Appendix C – (Cont.)**BERYLLIUM FACILITY ASSESSMENT FORM FOR CONEX BOXES****Facility Information**Assessment Date

Date that assessment was initiated. For revised assessments, this will be the date that the revisions began and not when the first assessment was started.

Project

Project/organization name that has responsibility for the facility. This should include both the WBS number and project name (for example RL13 WFMP). To facilitate the ability to sort data reports by project, always put the WBS number first and then the project name.

Date Built

While the date built can be more difficult to determine for Conex Boxes, an attempt should be made to determine the date. Potential sources for the date built include:

- Data plates on the Conex Box
- Procurement paperwork
- CC number issuance records

Summary of Items Stored

This should be a general summary of the type of items stored in the Conex Box and not a complete inventory.

ContactsIndividuals Contacted

List the names of all individuals who provided information used in this assessment. Include the date contacted and a summary of the information that they provided. List each individual's title (e.g. building administrator, NCO, RCT) as well as their level of knowledge with the building. Do not use the term "Facility Rep" to describe the project personnel familiar with the Conex. A "Facility Rep" is a DOE oversight person.

With the exception of the HAMTC CDBPP Representative, walkdown team members not associated the building should not be listed as individuals contacted. Other members of the assessment team may be listed in the Comments section, although this is not required.

Assessment InformationConex Box Information

If the date built for the Conex Box is unknown, it must be assumed that there is at least the potential for all of the questions to be true.

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When selecting the entry frequency, use the following guidance:

- Daily means that is entered every work day
- Weekly means at least once per week but not every day
- Monthly means not every week but at least once per month
- Annually means not every month but at least once per year

Characterization InformationRecommended Number/Location of Sampling Points for Items

List both the recommended number/location of characterization samples for the Conex Box as well as for any items. If characterization sampling has been completed, state:

“N/A, initial characterization has been completed.”

Summary of Sampling Data

Provide a summary of the number and type of samples collected as well as the results.

A total of eight samples were collected. All seven wipe samples were below the reporting limit of 0.025 µg/100 cm². The bulk sample had a reported concentration of 0.248 µg/g.

List the name(s) (and identification number if available) of the characterization report(s) for the Conex Box being assessed.

References

Conex Boxes will not normally have and references. Beryllium Characterization Reports and Beryllium Verification Reports can be attached to the BFA without listing them in the References Section.

CommentsComments

This should be a brief summary of the information obtained for this facility. This can include building type and materials, how decisions regarding areas/items of concern were made, and any other information deemed pertinent by the assessor. If documents were obtained during the assessment, they should be summarized here and referenced in the “References” section.

If there was no union representation on the walkdown, state the reason why in the Comments section. An appropriate comment could be: “C.H. Percy (CHPRC HAMTC CBDPP Representative) was contacted but she decided HAMTC participation was not required on the walkdown.”

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Appendix C – (Cont.)**BERYLLIUM FACILITY ASSESSMENT FORM FOR STRUCTURES****Facility Information**Assessment Date

Date that assessment was initiated. For revised assessments, this will be the date that the revisions began and not when the first assessment was started.

Project

Project/organization name that has responsibility for the facility. This should include both the WBS number and project name (for example RL13 WFMP). To facilitate the ability to sort data reports by project, always put the WBS number first and then the project name.

ContactsIndividuals Contacted

List the names of all individuals who provided information used in this assessment. Include the date contacted and a summary of the information that they provided. List each individual's title (e.g. building administrator, NCO, RCT) as well as their level of knowledge with the building.

With the exception of the HAMTC CDBPP Representative, walkdown team members not associated with the building should not be listed as individuals contacted. Other members of the assessment team may be listed in the Comments section, although this is not required.

Assessment InformationStructure Information

"Adjacent to Beryllium Controlled Facility" denotes that the structure is close enough to the BCF that cross contamination is a concern.

Characterization InformationCurrent Status

Answering "Yes" or "Potential" to one or more of the Structure Information questions would normally mean that the structure should be listed as a BCA. The walkdown team, however, can decide that a structure doesn't require sampling due to the configuration of the structure. Examples where this would be appropriate include loading docks and open sided storage areas.

Sampling Feasible/Appropriate

Sampling is only appropriate if one or more of the Structure Information questions are answered "Yes" or "Potential". If sampling is appropriate, the walkdown team needs to decide if it is feasible. For example, a smoke stack may have exposure to a cross-contamination source (sampling is appropriate), however, sampling may not be feasible. Likewise, it may be that sampling is not appropriate for structures that are exposed to blowing dust such as loading docks and open sided storage areas.

Beryllium Management Plan**Published Date: 04/25/19****Effective Date: 04/25/19****Appendix C – (Cont.)**Recommended Number/Location of Sampling Points for Structure

If characterization sampling has been completed, state:

“N/A, initial characterization has been completed.”

Summary of Sampling Data

Provide a summary of the number and type of samples collected as well as the results.

A total of eight samples were collected. All seven wipe samples were below the reporting limit of 0.025 µg/100 cm². The bulk sample had a reported concentration of 0.248 µg/g.

List the name(s) (and identification number if available) of the characterization report(s) for the structures being assessed.

References

Beryllium Characterization Reports and Beryllium Verification Reports can be attached to the BFA without listing them in the References Section.

CommentsComments

This should be a brief summary of the information obtained for this facility. This can include building type and materials, how decisions regarding areas/items of concern were made, and any other information deemed pertinent by the assessor. If documents were obtained during the assessment, they should be summarized here and referenced in the “References” section.

If there was no union representation on the walkdown, state the reason why in the Comments section. An appropriate comment could be: “C.H. Percy (CHPRC HAMTC CBDPP Representative) was contacted but she decided HAMTC participation was not required on the walkdown.”

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Appendix C – (Cont.)**BERYLLIUM SAMPLING PLAN****Buildings**Job Information

Sampling that is conducted due to areas and/or items of concern being present is characterization sampling. If a building doesn't have any Areas/Items of Concern (other than EDE), it doesn't require characterization sampling. If sampling is being conducted in preparation of the building being excessed or demolished, mark the Verification Sampling.

Identified Survey Units

If complete characterization sampling is being conducted, all identified survey units need to be listed. If partial characterization sampling is being conducted, only those survey units that will be sampled should be included on the sampling plan.

Survey units should either be given recognized, descriptive names or a map of the survey unit locations needs to be attached to the sampling plan.

Historical Sample Data

Summarize all relevant sampling data for the survey unit.

Identified Sample Locations

List all identified locations from the BFA. If more samples are required than identified locations, note that the remaining samples are to be collected at locations identified by the IH/IHT conducting the sampling.

If any items were identified as requiring sampling, they should be listed in this section.

Required Number of Sample Points for Survey Unit

List the required number of samples that need to be collected during the sample evolution. For example, if a total of 25 samples are needed for the survey unit but credit is being taken for 15 samples already collected, 10 samples should be listed in this box.

Beryllium Management Plan**Published Date: 04/25/19****Effective Date: 04/25/19****Appendix C – (Cont.)**Personal Protective Equipment

List any PPE that is required to access the building as well as to conduct the sampling.

Work Practices

At a minimum, include the following information in the Work Practices section:

- Shift Office / Building Administrator contact information
- Facility Specific Hazards and Controls (lighting, support personnel needs, etc.)
- Sampling Specific Hazards and Controls (fall protection, rad con requirements, etc.)
- Pre-job briefing requirements
- Statement requiring the Shift Office or Building Administrator authorizes the sampling evolution

Sample Analysis

There are two text boxes in the Sample Analysis section for additional detail “Other metals required” and “Special analysis requirements.” If there are no other metals and/or special analysis requirements, enter “N/A” into the text boxes so that there aren’t any blank spaces.

Comments/Deviations

Any deviations from what was recommended on the BFA regarding sampling should be listed in this section.

Structure/Conex BoxJob Information

Sampling that is initially identified on the BFA as required should be marked as Characterization sampling. Subsequent sampling should be identified as Verification sampling.

Number of Sample Points for Structure/Conex Box

The number of samples required on the Sampling Plan should match what is on the BFA. If they don’t, Please add a comment in the Comments/Deviations section of the Sampling Plan that explains the reason for the change if these numbers do not match (either more or fewer samples).

The number of samples listed in this section should not include the number of samples required for items.

Beryllium Management Plan**Published Date: 04/25/19****Effective Date: 04/25/19****Appendix C – (Cont.)**Location of Sample Points for Structure/Conex Box

List all identified locations. If more samples are required than identified locations, note that the remaining samples are to be collected at locations identified by the IH/IHT conducting the sampling.

Number/Location of Sample Points for Items

If items were identified on the BFA as requiring sampling, the number of required samples is listed in the Number of Sample Points for Items box. Specific items requiring sampling need to be identified. Note if the IH/IHT conducting the sampling has discretion in selecting the items to be sampled (e.g. collect 10 samples off of the HEPA vacuums).

Personal Protective Equipment

List any PPE that is required to access the building as well as to conduct the sampling.

Work Practices

At a minimum, include the following information in the Work Practices section:

- Shift Office / Building Administrator contact information
- Facility Specific Hazards and Controls (lighting, support personnel needs, etc.)
- Sampling Specific Hazards and Controls (fall protection, rad con requirements, etc.)
- Pre-job briefing requirements
- Statement requiring the Shift Office or Building Administrator authorizes the sampling evolution

Sample Analysis

There are two text boxes in the Sample Analysis section for additional detail “Other metals required” and “Special analysis requirements.” If there are no other metals and/or special analysis requirements, enter “N/A” into the text boxes so that there aren’t any blank spaces.

Comments/Deviations

Any deviations from what was recommended on the BFA regarding sampling should be listed in this section.

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Appendix C – (Cont.)**BERYLLIUM CHARACTERIZATION/VERIFICATION REPORT STYLE GUIDE****Characterization vs. Verification**

Ensure that the title correctly indicates whether the report is for characterization or verification sampling.

Executive Summary

The Executive Summary should summarize:

- Why sampling was conducted
- Results of the sampling
- Any conclusions reached
- Any further required actions

Ensure that the date of construction/manufacture is correct and consistent in both the Executive Summary and Introduction.

Introduction

The Introduction should describe the facility and any particular features that impacted sampling.

Sampling Strategy & Methodology

Describe any decisions regarding how sampling was conducted in this section.

Discuss any blank samples that have Survey ID Numbers that are not the final ID Numbers in the survey. For example:

14-23403-009 and 14-23403-010 are blank samples and not included in the Summary of Analytical Results table.

Deviations

All deviations from the Sampling Plan are discussed in Deviations. This includes:

- Collecting fewer samples than the BSP required
- Collecting more samples than the BSP required
- Changing the locations of required samples

Any samples that don't have a photograph should be discussed in Deviations section.

Beryllium Management Plan**Published Date: 04/25/19****Effective Date: 04/25/19****Appendix C – (Cont.)****Results Summary**

The number of samples collected must be correct and consistent in the Executive Summary, Sample Strategy, Results Summary, and the Results Table.

All non-measurable results reported by the lab should be less than the Reporting Limit (RL), not the Method Detection Limit (MDL). Notify the Beryllium Program Lead if there are any questions regarding whether a sample is reported below the RL or MDL.

The terms Reporting Limit and Reporting Detection Limit may be used interchangeably.

Conclusions/Recommendations

This section should clearly address any conclusions reached based on the sampling as well as any further actions that are required.

All conclusions should be clearly stated. An example of a clearly stated conclusion is:

Based on the analytical results CC1201 is beryllium cleared.

An example of a poorly stated conclusion is:

The analytical results suggest that CC1201 can be considered to be beryllium cleared.